



Purchasing Receipts

PO No	Supplier	Line Item No	Ref No	Terms	Purchased Item	Description	For Part No	Project	Equipment ID	Order Qty	Due Date	Received Quantity	Accounting Job No	Container No	Status	Receive Date	Price/Unit	Aging Days	Past Due	T
PO039520	MES002-VC	1	1	Net 30	M4130NR0.375	4130 Steel Round Bar .375": MATERIAL: AISI 4130N ROUND BAR AS PER MIL-S-6758 OR AMS 6348/6370/6528 receive ft				24	4/17/2018	24	S062939	Stock	4/19/2018	\$ 26.70 / ft	0	\$5		
										Total:	24	24								

Plex 4/19/2018 1:15 PM Dart.Dubois.Pascal



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO039520

Supplier:	MES002-VC Metaux Solutions 2625 boul Jacques-Cartier Est Longueuil QC J4N 1L7 Canada Phone: 800 558 8858 Fax: 514 633 8044	PO No:	PO039520
		PO Date:	4/6/18
		Due Date:	4/17/18
		Purchase Order Revision:	<i>REUISEN</i>
		Revision Date:	
		Ship-To Contact:	Lavoie, Chantal Phone: clavoie@dartaero.com
Ship To:	1270 Aberdeen Street Hawkesbury ON K6A 1K7 Canada Phone: 613-632-5200	Via:	Ground
		Pymt Terms:	Net 30
		Freight Terms:	
		Special Comments:	bid 26737

Items

Line Item	Part	Supplier Part No	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	M4130NR0.375		4130 Steel Round Bar .375" : MATERIAL: AISI 4130N ROUND BAR AS PER MIL-S-6758 OR AMS 6348/6370/6528 receive ft	Firmed	4/17/18	24 ft	0 ft	24 ft	\$26.70/ft	\$640.80

Line Item Note bar cut in half

Grand Total: \$640.80

Order Notes

Procurement Quality Clauses
 A005 right of entry
 A012 chemical and physical test report
 A016 personnel qualification
 A017 raw material identification (as applicable)
 A026 certification of material conformance
 A041 quality management system
 A042 dart notification by supplier
 A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 4/10/18 8:20 AM dart.lavoie.chantal

10 LBS

METAUX SOLUTIONS INC
2625 BOUL JACQUES CARTIER EST
LONGUEUIL, QUEBEC
J4N 1L7 Tel: 450 641-3330

Shipping Order

13/04/2018

Order : 134162
Reference : 39620
Bid : 26737
Ship : PICK UP / PICK UP

Customer: 6323336

DART AEROSPACE LTD
1270, ABERDEEN STREET
HAWKESBURY, ONTARIO
K6A 1K7

Ship To

Same

Tel.: 1 613 632-3336

Item No.	Description	Qty	Qty. Delive	B/O Qty
	***** FACTURER E-MAIL ***** SUPER IMPORTANT SUR LE PACKING SLIP INSCRIRE LES HEAT N			
	***** FACTURER E-MAIL ***** SUPER IMPORTANT SUR LE PACKING SLIP INSCRIRE LES HEAT N			
	***** FACTURER E-MAIL ***** SUPER IMPORTANT SUR LE PACKING SLIP INSCRIRE LES HEAT N			
MR384130	4130N .375 DIAM 2 bars cut in half ht:186921	24	<u>24</u>	<u>0</u>

SHIP FEDEX COLLECT #151793240

JP

Shipping : _____
Package No : _____

Ref. : _____

Merchandise Received:

10/169

Shipping Order

13/04/2018

METAUX SOLUTIONS INC
3625 BOUL' JACQUES CARTIER EST
LONGUEUIL, QUEBEC
J4N 1L7 Tel. : 450 641-3330

Order : 134162
Reference : 39520
Bid : 26737
Ship : PICK UP / PICK UP

Customer: 6323336

Ship To

DART AEROSPACE LTD
1270, ABERDEEN STREET
HAWKESBURY, ONTARIO
K6A 1K7

Same

Tel.: 1613 632-3336

Item No.	Description	Qty	Qty. Delivered	B/O Qty
	***** FACTURER E-MAIL ***** SUPER IMPORTANT SUR LE PACKING SLIP INSCRIRE LES HEAT N			
	***** FACTURER E-MAIL ***** SUPER IMPORTANT SUR LE PACKING SLIP INSCRIRE LES HEAT N			
	***** FACTURER E-MAIL ***** SUPER IMPORTANT SUR LE PACKING SLIP INSCRIRE LES HEAT N			
MR384130	4130N .375 DIAM	24	24	0
	2 bars cut in half ht:186921			
	SHIP FEDEX COLLECT #151793240			
	JP			

Shipping : _____

Ref. : _____

Package No. : _____

Merchandise Received: _____

Ssidenor

MILL TEST CERTIFICATE

Vitoria Plant

ISO 9001, ISO-TS 16949, ISO 14001 Y OHSAS 18001



Product Made in Spain

CUSTOMER: MAGELLAN CORPORATION

REFERENCE: 210894

PRODUCT NR:

SALES ORDER: 294537-1

WORKS REFERENCE: 1882035

HEAT NUMBER: 186921

MASTER REFERENCE: 221827

ROLLED: 23.06.2016

REQUERID PRODUCT

AISI14130 ROUND BARS COLD DRAWN NORMALIZING 0.3750" SPECIFICATION'S TOLERANCE 12'/12'2"
NORMAL

EXPEDITION

DELIVERY: 0080556260 WEIGHT (KG): 4.403

BUNDLES: 3

UNITS: 2.130

MADE ACCORDING TO

ASTM A108 - 15.08.2013 ; SAE-AMS 2301 K 08.2010 . SAE AMS 6348 D 10 2013

SAE AMS 6370 N . 05.2011 ; AISI BAR STEEL - .09 1996 , ASTM A304 2011 01.10.2011

ASTM A322 2013 . . 2013 ; ASTM A751 2014 01 03 2014 . SAE-AMS S6758 A SEPT 2003

ASTM A331 95(R2000) . .2000 ; ASTM A29-A29M 2015 01 11 2015

MAGELLAN MIC2016 1 30.01.2012 , MIL S6758B-NOT2 23/06/95 - 23.06.1995

EN 10204 : 2004 OCT. 2004 3.1

CHEMICAL ANALYSIS OF HEAT

U.% HEAT NUMBER: 186921

C	Mn	Si	P	S	Cr	Ni	Mo	Cu	Al
Min.	0,280	0,400	0,150		0,800		0,150		
Max.	0,330	0,600	0,300	0,025	0,025	1,100	0,250	0,250	0,350
cer.	0,290	0,460	0,250	0,014	0,003	0,850	0,220	0,164	0,210 0,003
D. I. ASTMA255 ("") .2,311									

JOMINY HARDENABILITY

HARDNESS U.:HRC QUENCHING TEMP.:1.600 °F

1/16"	2/16"	3/16"	4/16"	5/16"	6/16"	7/16"	8/16"	9/16"	10/16"	11/16"
Min.	49,0	46,0	42,0	38,0	34,0	31,0	29,0	27,0	26,0	26,0
Max.	56,0	55,0	53,0	51,0	49,0	47,0	44,0	42,0	40,0	38,0
cer.	50,5	49,5	49,0	46,0	43,0	40,5	36,0	33,0	31,5	31,0
	12/16"	13/16"	14/16"	15/16"	16/16"	18/16"	20/16"	22/16"	24/16"	26/16"
Min.	25,0	24,0	24,0	23,0	23,0	22,0	21,0	20,0		
Max.	35,0	34,0	34,0	33,0	33,0	32,0	32,0	32,0	31,0	31,0
cer.	29,0	28,5	28,0	27,0	26,5	26,0	25,5	25,0	24,5	24,0
	30/16"	32/16"								
Min.										
Max.	30,0	29,0								
cer.	23,5	23,0								
JOMINY Standard (ASTM A255 - . 2010)										

INCLUSIONS (MICROINCLUSIONS)

Standard (ASTM E45 2013 . . 2013) , Type/method (A) , A(t):0,5 , A(h):0 ; B(t):1 , B(h):0 ; C(t):0
C(h):0 ; D(t):0,5 ; D(h):0

INCLUSIONS (MACROINCLUSIONS)

Standard (SAE-AMS 2301 K 08.2010) , Severity(1):Promedio 0 , Severity(2):Individual 0

Frequency(1):Promedio 0 ; Frequency(2):Individual 0

MECHANICAL PROPERTIES AS SUPPLIED (TEST)

Hardness Standard (ASTM E10 2015 01.05.2015) ; Hardness (<= 241 HB): 227 HB

Core hardness (HB): 229 HB

ADDITIONAL TESTS

Standard (ASTM E384 - 1999) ; decarburization.:0,1 mm ; Standard (ASTM E112 2013 01.10.2013)

TECHNOLOGY & QUALITY CERTIFIES THAT THE PRODUCT FULL FILLS THE ORDER'S REQUIREMENTS

APPROVED BY: IGNACIO URBIETA LAVIADA

DATE: 24.10.2016

SIGN:

Page 1 of 2

Analyst of Quality certificates

REF.: 4001508410020



Sidenor

MILL TEST CERTIFICATE

Vitoria Plant

ISO 9001, ISO-TS 16949, ISO 14001 Y OHSAS 18001



Product Made in Spain

CUSTOMER: MAGELLAN CORPORATION
REFERENCE: 210894
PRODUCT NR:

WORKS REFERENCE: 1892035
SALES ORDER: 294537-1
MASTER REFERENCE: 221827

HEAT NUMBER: 186921
ROLLED: 23.06.2016

Grain size: Austenitic 7 ; Standard (ASTM E381 2001 R2006) ; macroetching(1): S 1
macroetching(2): B 1 ; macroetching(3): C 1 ; Radiactivity: <= 0,2 μ SV/H

NON DESTRUCTIVE TESTS

Surface defects standard (ASTM E709 2014 01.03.2014) ; Cracks control 100%: O.K.
Absence internal defects guaranteed by process

ADDITIONAL INFORMATION

Reduction ratio: 305,9 ; Material is free from any harmful magnetism
Melting Process: Electric Furnace and Vacuum Degassed; Continuous Casting 155 x 155 mm.
Product Made in Spain , Steel melted in Spain ; Material according to AMS/ MIL S-6758 COND. D4
Material is free of mercury and radioactivity contamination , No weld repair performed
Furnace calibration O.K. ; Steel is free from harmful radioactive contamination

Material melted and manufactured 100% in Spain through the Electric Arc Furnace and Vacuum Degassing route
Steel not exposed to Mercury, or to any other metal alloy that is liquid, at ambient temperatures during
processing or while in Sidenor's possession
Steel is free from Uranium or any other harmful radioactive contamination
Steel products were not repaired by welding

TECHNOLOGY & QUALITY CERTIFIES THAT THE PRODUCT FULL FILLS THE ORDER'S SPECIFICATIONS
APPROVED BY: IGNACIO URBIETA LAVIADA
DATE: 24.10.2016

Page 2 of 2

SIGN:

Analyst of Quality Certificates



REF : 4001308410020

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M4130NR0.375
 DATE: APR 19 2018

PO / BATCH NO.: 039520/5062939

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 24
 QUANTITY INSPECTED: 24
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.375
 THICKNESS RECEIVED: 0.375
 SHEET SIZE ORDERED: N/A
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	<input checked="" type="radio"/> Y <input type="radio"/> N	
CORRECT FINISH	<input checked="" type="radio"/> Y <input type="radio"/> N	
CORROSION	<input checked="" type="radio"/> Y <input type="radio"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/> Y <input type="radio"/> N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="radio"/> Y <input type="radio"/> N	<i>AMS 6348</i>
CORRECT THICKNESS	<input checked="" type="radio"/> Y <input type="radio"/> N	
PHOTO REQUIRED	<input checked="" type="radio"/> Y <input type="radio"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/> Y <input type="radio"/> N	<i>Harder 186921</i>
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/> Y <input type="radio"/> N	
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/> Y <input type="radio"/> N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	<input checked="" type="radio"/> Y <input type="radio"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	<input checked="" type="radio"/> Y <input type="radio"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	WEBSTER

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY:	<u>DAS 11</u>	SIGNED OFF BY:	
DATE:	<u>9-89 APR 19 2018</u>	DATE:	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



OACOPYISSUE

DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO.	REV. A SHEET 1 OF 1
DATE	02.04.19	TITLE	SCALE NTS
A	02.04.19	4130 ROUND BAR	NEW ISSUE

PURCHASE MATERIAL: AISI 4130N ROUND BAR
PER MIL-S-6758 OR AMS 6348/6370/6528

PART NUMBER: M4130N-R D.DDD | WHERE D.DDD = DIAMETER IN INCHES
| DIA
EG. 7/8" ROUND BAR = M4130N-R0.875

RELEASED
02.05.06 #

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